

# OPTICAL SYSTEM FOR PROJECTION DISPLAY

## Abstract

An optical system disposes a total reflection lens between a light valve and a projection lens. When a white light beam, emitting from a light source, passes through a color-generating device, the color of the light beam is sequentially converted into red, green, and blue primaries, and uniformed by an integrator. Then, the light beam impinges into the total reflection lens and is reflected to the light valve. The light valve reflects the light beam into a projection lens to be projected on a screen. Therefore, this invention increases the projection efficiency, and reduces the bulk and components of the optical system.